



Gover

GOVERNMENT OF INDIA  
MINISTRY OF  
COMMERCE & INDUSTRY

*Report*  
OF THE  
**INDIAN TARIFF BOARD**  
ON THE  
**COTTON TEXTILE MACHINERY**  
(FLUTED ROLLERS AND TIN ROLLERS)  
**INDUSTRY**

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4. Butter colour and aerated water powder colour (1946)	PTB	154
5. Calcium chloride (1946)	PTB	155
6. Coated abrasives (other than grinding wheels) (1946)	PTB	15
7. Hurricane lanterns (1946)	PTB	16
8. Cocoa powder and chocolate (1946)	PTB	153
9. Wood screws (1946)	PTB	97
10. Bicycles (1946)	PTB	100
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21. Alloy tool and special steel (1947)	PTB	118
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23. Electric motors (1947)	PTB	112
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26. Cotton and hair belting (1947)	PTB	121
27. Starch (1947)	PTB	103
28. Glucose (1947)	PTB	104
29. Chloroform, ether sulphuric p.b. and anaesthetic and potassium permanganate (1947)	PTB	109



**R E P O R T**  
OF THE  
**INDIAN TARIFF BOARD**



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PERSONNEL OF THE PANEL WHICH HEARD THE CASE

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Mr. B. N. Adarkar	...	Member



GOVERNMENT OF INDIA  
MINISTRY OF COMMERCE & INDUSTRY

*New Delhi, the 21st July, 1951.*

RESOLUTION  
(Tariffs)

No. 36(5)-T.B./51. - The claim of the Cotton Textile Machinery (Fluted Rollers and Tin Rollers) Industry was referred to the Tariff Board for investigation and report in January 1950. The Board has submitted its report. The scope of the inquiry covers all kinds of fluted rollers and tin rollers used in textile industries.

2. The Board's recommendations are as follows:

- (i) The existing duty of 10½ per cent *ad valorem* on fluted rollers and tin rollers affords adequate protection to the domestic industry. The duty should remain in the protected category, so long as complete ring frames continue to enjoy protection, and should have the same duration as the duty on complete ring frames, that is up to 31st March, 1953,
- (ii) The Iron and Steel Controller should examine the possibility of making available to the industry 15/16" and other sizes of steel rods which are more economical for the manufacture of fluted rollers than the sizes available at present;
- (iii) The industry should be given all possible assistance in securing its requirements of tin sheets;

- (iv) The indigenous manufacturers of fluted rollers should take note of the defects pointed out by the consumers and try to remedy them through better training of their personnel and through better technical control;
- (v) The Indian Standards Institution should consider the desirability of evolving standard specifications for fluted rollers;
- (vi) The manufacturers should make arrangements at their own works for the proper testing of the fluted rollers produced by them;
- (vii) Government should arrange for a periodical testing of the indigenous fluted rollers and tin rollers;
- (viii) Arrangements should be made with the Director General of Commercial Intelligence and Statistics and the Collectors of Customs to record separately imports of fluted rollers and tin rollers in future; and
- (ix) The industry may make its representations regarding the internal freight rates on fluted rollers and tin rollers directly to the railway authorities, producing the necessary facts and figures to show that the existing rates are hampering the free flow of traffic.

3. Government accept all the above recommendations of the Board. The attention of the Industry is drawn to recommendations (iv), (vi) and (ix) above.

A.S. IALL,  
Joint Secretary to the Government of India.

## REPORT ON THE COTTON TEXTILE MACHINERY (FLUTED ROLLERS AND TIN ROLLERS) INDUSTRY

An inquiry into the claim of the Cotton Textile Machinery industry to protection or assistance was held by the

Reference Tariff Board on 12th and 13th July, 1949 and a report was submitted to Government on 11th October, 1949.

to the Board. The scope of that inquiry was limited to the items specified by the Government of India in the late Ministry of Commerce in their letter No. 2-T(5)/48, dated 24th December, 1948, in pursuance of which the inquiry was undertaken. The items were: spinning ring frames, spinning rings, spindles, looms and parts of looms. The Board, in its Report, recommended, *inter alia*, the levy of a protective duty at 10 per cent. *ad valorem* on spinning ring frames, spinning rings, spindles and plain looms for a period of three years ending 31st March, 1953. The recommendation was accepted by Government and given effect to by their Notification No. 36(5) T.B./49, dated 17th December, 1949. The rates of duties required to protect individual parts of ring frames, other than spindles and rings, were not considered by the Board; nevertheless, in order that the duty on complete ring frames may be fully effective, Government found it necessary to extend the application of that duty to all parts of ring frames. Fluted rollers and tin rollers, thus, became subject to a protective duty of 10 per cent. *ad valorem*. This, however, did not mean the grant of substantive protection to the fluted and tin rollers section of the industry, that is, independently of the protection granted in respect of complete ring frames. The question of granting such protection to the fluted and tin rollers section was raised by certain representatives of the industry towards the end of the main inquiry, and the Board had advised that it needed separate examination. Accordingly, the Government of India, in the late Ministry of Commerce, by their letter No. 1-T.A. (60)/49, dated 4th January, 1950, referred the question to the Board for investigation.

3. Under the terms of reference contained in the Government of India Resolution No. 218-T(55)/45, dated reference, 3rd November, 1945, the Board has to satisfy itself

- (1) that the industry is established and conducted on sound business lines;
- (2) (a) that having regard to the natural or economic advantages enjoyed by the industry and its actual or probable costs, it is likely within a reasonable time to develop sufficiently to be able to carry on successfully without protection or State assistance; or
- (b) that it is an industry to which it is desirable in the national interest to grant protection or assistance and that the probable cost of such protection or assistance to the community is not excessive.

Where a claim to protection or assistance is found to be established i.e., if condition (1) and condition (2) (a) or (b) are satisfied, the Board may recommend -

- (i) whether, at what rate and in respect of what articles, or class or description of articles, a protective duty should be imposed;
- (ii) what additional or alternative measures should be taken to protect or assist the industry; and
- (iii) for what period, not exceeding three years, the tariff or other measures recommended should remain in force.

In making its recommendations the Board has to give due weight to the interests of the consumer in the light of the prevailing conditions and also consider how the recommendations affect industries using the articles in respect of which protection is to be granted.

3. The present inquiry covers all kind of fluted rollers and tin rollers used in textile industries.

Scope of the industry.

4. The Board issued a press communique on 18th February, 1950 inviting producers, importers, consumers and others interested in this industry to give their views to the Board. The Board requested that their views should be considered by the Board to get copies of the Board's detailed questionnaires, and send replies thereto. Copies of the questionnaires were issued to all the known producers, importers, consumers and other interested parties. The Director-General of Industries and Supplies, the Textile Commissioner and the Directors of Industries of Bombay, Madras and West Bengal were also requested to give their views on this industry. A list of persons to whom the Board's questionnaires were issued and from whom replies or memoranda were received is given in Appendix I. Shri S.V. Rajan, Assistant Cost Accounts Officer attached to the Board, visited the factories of the Textile Machinery Corporation Limited, Belghurria, West Bengal, and the Star Textile Engineering Works Limited, Bombay, and examined their costs of production. Shri B.N. Adarkar, Member, Shri M.A. Mulky, Secretary and Shri B.R. Sehgal, Assistant Secretary, Indian Tariff Board, visited the Star Textile Engineering Works Ltd., Bombay, and the Khatau Makanjee Spinning and Weaving Mills Ltd., Bombay, on the 24th February, 1951. A public inquiry was held at the Board's office in Bombay on 27th February, 1951. A list of those who attended the inquiry and gave evidence will be found in Appendix II.

5. Fluted rollers and tin rollers are essential components of spinning frames. Fluted rollers are used for drafting silver or roving into yarn, and tin rollers for driving spindles.

6. Fluted rollers are at present manufactured by the Textile Machinery Corporation Ltd., Calcutta (hereafter referred to as the "Texmaco"), the Textools Ltd. Coimbatore, and the Star Textile Engineering Works Ltd., Bombay, and tin rollers by only the first two of these units. The details of the pro-

Principal  
manufac-  
turing  
units

ductive capacity and actual production of these units are given later in the Report. The Texmaco was started in 1939 with the object of manufacturing textile machinery. The managing agents are Messrs. Birla Brothers Calcutta. The company has a paid-up capital of Rs. 1 crore. It was engaged on war production until 1945 and was able to start the manufacture of textile machinery and spare parts only in 1947. The Textools Ltd., Coimbatore, was registered in 1946. It is managed by Messrs. Balasundaram and Company and has a paid-up capital of Rs. 5 lakhs. Both the Texmaco and the Textools produce ring frames and a number of spare parts, including fluted rollers and tin rollers. The Star Textile Engineering Works, Ltd., Bombay, were started in 1948 with a paid-up capital of Rs. 5 lakhs. The Company is managed by Messrs. M.J. Mehta and Company. It produces only fluted rollers in its own workshop, but gets tin rollers made by sub-contractors. At the time of the last inquiry into the Cotton Textile Machinery Industry, held in July, 1949, the Acme Manufacturing Company Limited, Bombay, was known to be manufacturing fluted and tin rollers, but the firm has since stopped the production of fluted rollers altogether. We understand that the manufacture of fluted rollers will shortly be taken up by three other units, namely, the National Machinery Manufacturers Ltd., Bombay, the Laxmiratan Engineering Works Ltd., Bombay and the Ramakrishna Industrials Ltd., Coimbatore. The National Machinery Manufacturers expect to start their production some time in 1952 and the Laxmiratan Engineering Works by June or July 1951. The Ramakrishna Industrials have informed us that they are importing machinery for the manufacture of fluted rollers from Japan. It is, however, not known when they will be able to commence their production of this article.

7. The principal raw materials required for the manufacture of fluted rollers and tin rollers are the raw materials following:-

*Fluted Rollers:-*

- (1) Tempered steel rods; (2) Furnace oil; (3) Washing soda; (4) Sodium Cyanide; (5) Acids.

*Tin rollers:*

(1) Tinplates; (2) Pig Iron; (3) Steel rounds; (4) soldering lead; (5) Black lead; (6) Charcoal; (7) Kerosene Oil; (8) Rosine; (9) Sal Ammoniac.

The Texmaco use M.S. steel rods produced by the Tata Iron and Steel Company, while the Star Textile Engineering Works use steel rods imported from abroad. The former company manufactures 7/8" rollers from 1" rods;  $\frac{3}{4}$ " rollers from 7/8" rods and 9/16" rollers from  $\frac{5}{8}$ " rods. The latter company uses 15/16" rods for 7/8" rollers and 13/16" rods for  $\frac{3}{4}$ " rollers. No 9/16" rollers are manufactured by the Star Textile Engineering Works. The type of steel most suitable for the manufacture of fluted rollers is either free cutting or semi-free cutting steel. At the public inquiry, the representative of the Star Textile Engineering Works stated that his firm had failed to secure 15/16" rods from Tatas and had consequently to rely on imports. The representative of Tatas, on the other hand, explained that the entire production of steel was controlled by the Iron and Steel Controller who did not permit the production of certain sizes, such as 15/16", because the total requirements of such sizes were too small to make their production economical. We do not think it desirable that the Star Textile Engineering Works should continue to depend on imported rods just because 15/16" rods are not locally available. The Texmaco are using 1" rods to make 7/8" rollers and it is difficult to understand why the Star Textile Engineering Works should not be able to do the same. It would, of course, be more economical for the industry, if indigenous rods of 15/16" diameter were available and we, therefore, recommend that the Iron & Steel Controller should examine the possibility of making available to the industry 15/16" and other sizes of steel rods which are more economical for the manufacture of fluted rollers than the sizes available at present.

The industry is at present using case-hardening salts prepared by Messrs. Hardcastle and Ward Manufacturing

Company Ltd., Bombay. These salts are prepared from a mixture of indigenous and imported chemicals. The manufacturers had represented to us that the salts supplied by Messrs. Hardcastle and Waud were not as suitable as the imported salts and were also about 70 per cent. more expensive. At the public inquiry, however, the representatives of the manufacturers admitted that there was an acute shortage of this material in the exporting countries and that it would be difficult to procure it in adequate quantities, even if the necessary import licences were granted. In the circumstances, the industry has no option but to use the salts available in India.

The Ramakrishna Industrials Ltd., and the Acme Manufacturing Company Ltd., have stated that they are unable to get tin sheets required for the manufacture of tin rollers. We recommend that the industry should be given all possible assistance in securing its requirements of tin sheets.

The industry has had no difficulty in securing its requirements of any of the other materials mentioned above.

8. (i) *Fluted rollers*: In his memorandum to the Board, Domestic demand estimated the annual demand for fluted rollers at 3,70,000 pieces. This estimate was discussed at the public inquiry and the various assumptions on which it was based were carefully scrutinized. After considering the views expressed by various interests, we have estimated the total demand for fluted rollers at 4,60,000 pieces. This figure has been worked out as follows:-

Fluted rollers are used in ring frames, speed frames and other preparatory machines like drawing frames and combers. The total installed spindlage in the Indian Union at present is estimated at 10 million. Some ring frames have three lines of rollers, while others have 4 lines. In the former type of ring frames, three fluted rollers are used for eight spindles, while in the latter, four rollers are

required for the same number of spindles. It has been estimated that the existing ring frames are divided between these two types in equal proportion. On this basis, the total number of ring frame fluted rollers at present in use in India may be estimated at 4.4 million pieces. The front line rollers usually last for about 10 years and those in other lines from 12 to 15 years. Assuming the average life to be about 13 years, the total annual demand for fluted rollers for replacement purposes comes to 3,40,000 pieces.

The total number of speed frame spindles in the Indian cotton textile industry is 2 million. The number of fluted rollers required for this spindlage is 1.5 million. Assuming an average life of 13 years, the annual requirements of speed frame fluted rollers for replacement purposes may be put at 1,15,000 pieces.

There are in all 6,000 drawing frames in India, and since each drawing frame has four lines of fluted rollers, the total number of rollers at present in use in drawing frames is 24,000 lines. Each drawing frame roller may be assumed to last for 13 years. The replacement demand for this type of rollers may, therefore, be estimated at 1,800 lines or about 2,000 pieces. The demand for fluted rollers for combing machines is small.

The total annual demand for fluted rollers of all kinds may, therefore, be estimated at about 4,60,000 pieces.

(ii) *Tin rollers*: Ring frames in which spindles are driven by tapes require only one set of tin rollers each. It is estimated that there are in all 15,000 frames of this type in India and the total number of tin rollers in use in such frames is, therefore, 15,000 sets. A band-driving arrangement requires two sets of rollers per frame and since the number of ring frames with this kind of arrangement is estimated at 10,000, the corresponding number of tin rollers is 20,000 sets. The total number of tin rollers at present

at work in India is, therefore, 35,000 sets or 1,75,000 pieces. Assuming an average life of 15 years, the annual replacement demand would appear to be 11,700 pieces. It was stated at the public inquiry, however, that new tin rollers are purchased by mills only occasionally and that very often old rollers are re-used after reconditioning. Some mills only purchase the component parts, such as blocks, shafts and tin-sheets and make the rollers themselves. This was also confirmed by the manufacturers. In view of these facts, it was agreed at the public inquiry that the effective demand for tin rollers should not be taken at more than 50 per cent. of the figure given above, i.e., roughly 6,000 pieces.

9. (i) *FLUTED ROLLERS:* (a) *Capacity:-* The following table shows the installed capacity of the various units of the indigenous industry for the manufacture of fluted rollers, as determined by the Board after discussion at the public inquiry:-

Name of the unit	1951	1952	1953
Texmaco	62,000	62,000	62,000
Star Textile Engineering Works	15,000	15,000	15,000
Textools	14,400	14,400	14,400
National Machinery Manufacturers		36,000	72,000
Acme	30,000	30,000	30,000
Laxmiratan	8,000	18,000	24,000
Ramakrishna Industrials	—	—	—
<b>TOTAL</b>	<b>129,400</b>	<b>175,400</b>	<b>217,400</b>

Texmaco had originally estimated their capacity at 1,20,000 rollers per annum on two shifts. It is understood, however, that the annual capacity of the most up-to-date fluting machine, as certified by the manufacturers of such machines,

is only 24,000 rollers per single shift at the maximum. The Company has only two fluting machines and its representatives who attended the public inquiry were unable to indicate the rated capacity of each of those machines. They, however, maintained that the rated capacity of their factory should be taken at at least 96,000 rollers, i.e. as equal to the maximum capacity of two fluting machines for 2 shifts at the rate of 24,000 rollers per machine per shift. At the same time, they admitted that the actual output of their factory in the near future was expected to be of the order of 62,000 rollers per annum. This was the figure which had been previously agreed upon between the company's technical experts and the Board's Cost Accounts Officer as a suitable basis for estimating the Company's cost of production for 1951-52. Moreover, the Texmaco is the only unit which has estimated its rated capacity on the basis of double shift working. At the public inquiry, Mr. Krishnaraj M.D. Thackersey drew our attention to the fact that owing to the high degree of precision required in the manufacture of fluted rollers, double shift working was most uncommon in this industry. Mr. Thackersey added that none of the seven fluted roller factories which he had occasion to visit in foreign countries were found to be working two shifts. The representative of a British manufacturing concern who was present at the public inquiry stated that his factory was working two shifts. It was, however, agreed that this was not the general practice. The Texmaco is actually working two shifts, but its representatives admitted that the more skilled operations are performed only during the day shift. Taking all these factors into account, we have come to the conclusion that the effective capacity of the Texmaco should be taken at 62,000 rollers only and we have accordingly given this figure in the above statement.

In the case of the Star Textile Engineering Works, the rated capacity of their fluting machine is 18,000 rollers per annum, but on normal working, only about 85 per cent. of this capacity can be effectively utilised. The capacity of this firm has accordingly been taken at 15,000 rollers per annum.

The National Machinery Manufacturers will have a maximum rated capacity of 12,000 rollers per month, of which 50 per cent. will be used in their own ring frames. They expect to commence production some time in 1952 and to produce 36,000 rollers in that year and 72,000 in the following year.

The Laxmiratan Engineering Works Ltd., will commence production by June or July 1951 and will eventually have a capacity of 24,000 rollers per annum. They expect to be able to produce about 8,000 rollers in 1951, 18,000 in 1952 and 24,000 in 1953.

The Ramakrishna Industrials Ltd., expect to have a capacity of 15,000 to 30,000 rollers per annum. They did not, however, send a representative to the public inquiry and it is not known when they propose to start production. The figures for this concern have, therefore, not been included in the above statement.

Thus, the aggregate capacity of the domestic industry, which can be effectively utilised may be estimated at 1,30,000 rollers in 1951, 1,75,000 rollers in 1952 and 2,20,000 rollers in 1953.

Two of the units, namely, the Texmaco, and the Textools, at present manufacture complete ring frames, and consequently a part of their production of fluted rollers is used in making complete ring frames. No indication is available as to when the National Machinery Manufacturers propose to start production of complete ring frames. We have assumed the probable output of complete ring frames in India during the next three years to be 250 per annum: 200 by the Texmaco and 50 by the Textools. It was agreed at the public inquiry that the average number of fluted rollers required for the type of ring frames sold by these units may be taken at 175 per ring frame. On this basis, the two units will probably consume 43,750 fluted rollers in their own factories. Deducting this quantity from the figures of total capacity

given above, the capacity of the indigenous industry for the production of fluted rollers, as spares, comes to 86,250 rollers in 1951, 131,250 rollers in 1952, and 176,250 in 1953.

(b) *Production*:- The data regarding the total production of fluted rollers in India, the number of fluted rollers used in the manufacture of ring frames and the number available for sale as spares during 1948, 1949 and 1950 are given in the following table:-

	1948	1949	1950
<i>Textmaco:</i>			
1. Production	48,690	43,194	57,809
2. Used in complete ring frames	32,000	23,400	35,150
3. Available for sale as spares	16,690	19,794	22,659
<i>Textools:</i>			
1. Production	5,416	5,114	4,305
2. Used in complete ring frames	5,136	4,613	3,523
3. Available for sale as spares	280	501	782
<i>Star Textile Engineering Works:</i>			
1. Production (as spares only)	-	7,500	11,566
<i>Total:</i>			
1. Production	54,106	55,808	73,680
2. Used in complete ring frames	37,136	28,013	38,673
3. Available for sale as spares	16,970	27,785	35,007

The production of fluted rollers showed a marked increase during 1950 as compared with the preceding years. In 1950, the production in the three units mentioned above amounted to 80.6 per cent. of their rated capacity as estimated by us in paragraph 9(i) above. The average number of fluted rollers available with the three units for sale as spares

was 26,591 per annum during the three years, 1948-50, and this comes to 5.8 per cent. of the total domestic requirements for fluted rollers as spares, estimated at 4,60,000 per annum in paragraph 8(i) above. We are informed by the Director-General of Industries and Supplies that the indigenous industry does not produce fly frame fluted rollers. The cotton mill industry requires 1,15,000 rollers of this type per year.

(c) *Import requirements*:- Assuming that the indigenous industry will be able to produce up to the limit of its estimated capacity, the annual import requirements for fluted rollers, as spares, may be estimated as follows:-

	1951	1952	1953
1. Capacity	1,31,000	1,75,000	2,20,000
2. Number required for production of complete ring frames	43,750	43,750	43,750
3. Number available for sale as spares	86,250	1,31,250	1,76,250
4. Domestic requirements	4,60,000	4,60,000	4,60,000
5. Import requirements	3,73,750	3,38,750	2,83,750

The above figures of import requirements are based on the assumption that the capacity as indicated in 1 above will be fully utilised. Should this assumption not materialise, the import requirements will be larger. If, on the other hand, the actual production of complete ring frames turns out to be smaller than 250 frames per annum, the domestic industry will be able to supply a larger number of fluted rollers as spares than that indicated above, with the result that the import requirements will be smaller.

(ii) *TIN ROLLERS*: (a) *Capacity*:- The manufacture of tin rollers does not require the kind of specialised equipment which is needed for the production of fluted rollers, and we understand that the domestic industry will be able to

expand the production of tin rollers within wide limits according to demand. However, we give below the figures of rated capacity as declared by the manufacturers. These were generally accepted at the public inquiry.

Texmaco	5,616	rollers per annum.
Textools	360	"
Acme	600	"
<b>Total</b>	<b>6,576</b>	"

The Star Textile Engineering Works do not produce tin rollers themselves, but in 1950, they sold 350 tin rollers which were manufactured for them by their sub-contractors. The number of tin rollers which can be manufactured in this way cannot be precisely estimated, but on the basis of available information, we think that the domestic industry can supply about 7,000 tin rollers per annum.

(b) *Production*:- The following table shows the production of tin rollers in India, the number of tin rollers used in the manufacture of complete ring frames by the two units which manufacture ring frames and the number of available for sale as spares during 1948, 1949 and 1950:-

	1948	1949	1950
<i>Texmaco:</i>			
(a) Production	1600	1878	1630
(b) Used in complete ring frames	1104	702	1296
(c) Available for sale as spares	496	1176	334
<i>Textools:</i>			
(a) Production	155	169	137
(b) Used in complete ring frames	155	130	113
(c) Available for sale as spares	-	39	24

	1948	1949	1950
Total:			
(a) Production	1755	2047	1767
(b) Used in complete ring frames	1259	832	1409
(c) Available for sale as spares	496	1215	358

The production of tin rollers in India was higher in 1949 than in the preceding or the following year, though it amounted to only 29 per cent. of the estimated capacity. The average number of tin rollers available for sale as spares with the domestic manufacturers during the three years from 1948 to 1950, comes to 690 which was 11.5 per cent. of the estimated requirements of 6000 rollers per annum. The demand for tin rollers has been very poor, since, as stated earlier, many mills have been re-using their old rollers after repairs.

(c) *Import requirements*:- The domestic industry has enough capacity to meet the estimated requirements of tin rollers and it was, therefore, generally agreed at the public inquiry that tin rollers need not be imported.

10. The quality of the indigenous fluted rollers and quality of the tin rollers was discussed at considerable length at the public inquiry. As regards indigenous product, fluted rollers, the representatives of the cotton mills and the Mill-owners' Association, Bombay, drew pointed attention to the following defects of the indigenous product, namely: (1) that the case-hardening of the necks was not satisfactory; (2) that the number of flutes on an indigenous roller was smaller than that on an imported roller of the same diameter; (3) that the flutes were also not well-cut and that they were often found to be irregular and not exactly parallel; and (4) that the indigenous rollers when joined to form a line, disclosed slight defect in concentricity. The manufacturers explained to us that the smaller number of flutes on some of the rollers supplied by them to Indian mills was due to the fact that the rollers were intended to be used for the spinning of coarse and

**medium counts** It appeared from the discussion at the public inquiry that it was for the indenting mills to specify the number of flutes required by them according to the counts of yarn they wished to spin, and that the manufacturers should have no difficulty in producing rollers with any number of flutes that might be specified. We are informed by the Texmaco that they supplied 41 flute rollers on their standard ring frames, but that when rollers were required as spares, they usually asked for the number of flutes to be specified. The other defects mentioned above, however, cannot be similarly explained and are probably due to lack of adequate experience on the part of the indigenous manufacturers. Operations like fluting and trueing demand a high degree of skill and precision on the part of workers and these are developed by long experience. Despite the defects mentioned above, most of the mills which have actually used the indigenous rollers have stated that, with better precision and workmanship, the indigenous rollers can be quite useful. These rollers are in use in several mills, many of which have placed repeat orders, and from the discussion at the public inquiry, we are satisfied that the indigenous product is, on the whole, satisfactory. We, however, recommend that the manufacturers should take note of the defects pointed out by the consumers and try to remedy them through better training of their personnel and through better technical control. Further, the Indian Standards Institution should consider the desirability of evolving standard specifications for fluted rollers. The manufacturers should also make arrangements at their own works for the proper testing of the rollers produced by them. Mr. Munshaw of the Association of Merchants and Manufacturers of Textile Stores and Machinery, Bombay, has suggested to us that in testing fluted rollers, attention should be paid principally to the following points, namely, dimensional precision, the design and accuracy of flutes, the specification of steel, the metallurgical structure of steel after case-hardening, hardness and the depth of the hard surface,

the absence of flexibility or deflection and the fitting of individual pieces and their interchangeability. We understand from the Texmaco that the D.G., I & S. recently carried out certain tests on three rollers selected at random from their works. We have received a copy of a report dated 13th October, 1950, from the Government Test House, Alipore, on these tests which states that of the three rollers tested, the hardness of the journals and body of two rollers was generally similar, while that of the same parts of the third roller was less. A chemical analysis of the steel used in these rollers was to be made later and no comparison with imported rollers could also be made, since no samples of the latter had been sent along with those of indigenous rollers. We recommend that in order to safeguard the interests of the consumer, arrangements should be made by Government for periodical tests of the indigenous fluted rollers.

As regards tin rollers, the Mill-owners' Association, Bombay, as well as certain individual mills, have pointed out to us that the indigenous tin rollers are heavier and require more power to drive them. The soldering is defective and sometimes gives way at the joints. Because of their heaviness, the indigenous tin rollers do not stand up to high speeds. At a speed of 1200 R.P.M., an indigenous tin roller would vibrate so much as to eventually go out of alignment. The Kamala Mills, Bombay, have stated that the maximum speed for an Indian tin roller is about 1600 R.P.M., while that for an imported one is 1200 R.P.M. We have received no satisfactory explanation of these defects from the manufacturers, and suggest that the manufacturers should take steps to remove them. Considering the fact that some of the mills are making tin rollers in their own workshops, we see no reason why factories which specialise in the production of textile machinery should not be able to produce tin rollers of satisfactory quality. As in the case of fluted rollers, we recommend that arrangements should be made for a periodical testing of the indigenous tin rollers also.

11. (a) Imports of fluted rollers and tin rollers are imports. not recorded separately in the Sea-borne Trade Accounts. We recommend that arrangements should be made with the Director-General of Commercial Intelligence and Statistics and the Collectors of Customs to record imports of these articles in future.

(b) During the period January/June, 1950, imports of fluted rollers and tin rollers were licensed from all Control sources, subject to a monetary ceiling. For the following period, the licensing policy announced in June, 1950 had provided for *ad hoc* licences for these articles from all sources, but subsequently, on 11th November, 1950, a public notice was issued laying down a revised procedure for regulating imports of ring frames, looms, carding engines and spares for ring frames, including fluted rollers and tin rollers. Under this procedure, applications for import licences for any of these articles could be made only by the existing textile mills and import licences were to be granted only to the extent of 80 per cent. of the difference between the total requirements as assessed by Government and the amount which was considered to be available from domestic production. The Deputy Chief Controller of Imports was to inform the applicants of the extent to which suitable indigenous machinery was available to meet their requirements. For this purpose, no indigenous machinery was to be considered suitable, unless it had been inspected by a duly authorised Government of India Inspectorate of Textile Machinery and had received a certificate of suitability from that Inspectorate. Each applicant to whom an import licence was issued was required within three months of the date of issue of the licence to place firm orders on the indigenous manufacturers for that part of his requirements which was to be met from indigenous production, failing which the licence was to become null and void. This revised procedure was made applicable to all applications received during July/December, 1950. On 26th February, 1951, this procedure was further

amended and a public notice issued on that date laid down that so far as applications received during July/December, 1950 were concerned, licences would be granted for 70 per cent. of the requirements of spare parts applied for, subject to certification by the Textile Advisory Committee No. III attached to the Textile Commissioner, Bombay. The balance 30 per cent. was to be met from indigenous production. The same policy has been continued for the licensing period January/June, 1951.

12. Fluted rollers and tin rollers are at present assessed under item 72(31) of the First Schedule to the Indian Customs Tariff 33rd Issue. The inclusion of these articles in this item was only consequential to the levy of a protective duty on spinning ring frames of which they are essential parts. The relevant extract from the Customs Tariff is given below.

Item No.	Name of the article	Nature of duty	Standard rate of duty	Preferential rate of duty if the article is the produce or manufacture of			Duration of protective rates of duty
				The United Kingdom	A British Colony	Burma	
1	2	3	4	5	6	7	8

2(34) The following cotton textile machinery and apparatus and parts thereof, by whatever power operated, namely, spinning ring frames, spinning rings, spindles and plain looms.

Pro-  
tec-  
tive  
ad  
valorem\*

10 per  
cent.  
..  
..

Free

March 31,  
1953.

\*Under the Finance Act, 1951, a surcharge of 5 per cent. of the duty has been imposed on this item.

13. (a) The Assistant Cost Accounts Officer attached to the Board examined the cost of production of fluted rollers and tin rollers in the Texmaco and that of only fluted rollers in the Star Textile Engineering Works. No tin rollers are produced by the latter firm in its own factory. The Texmaco is the largest unit in the industry and is equipped with an up-to-date plant. We have, therefore, taken the cost data for the Texmaco only as representative of the whole industry.

(b) The cost data prepared by the Assistant Cost Accounts Officer consists of estimates of (a) the actual costs of production of fluted rollers and tin rollers in 1950, and (b) the probable costs of production of these articles in 1951 and 1952. We have discussed the estimates relating to the Texmaco with the representatives of the firm.

(c) In 1950, the Texmaco produced 57,809 fluted rollers and 1,630 (equal to 11,566 feet of) tin rollers. The estimates of the costs of production in 1951 and 1952 have, however, been based on an output of 62,000 fluted rollers and 1,800 tin rollers. We understand that fluted rollers, 21" long and 7/8" diameter, and tin rollers, 10" diameter, are regarded as the most representative types, and, accordingly, the costs of production estimates prepared by us relate to these types. The unit is one piece of 21" length in the case of fluted roller and a set of 5 pieces with a total length of 44 feet in the case of tin rollers.

(d) The main points which arise in connection with the estimates of costs of production for 1951 and 1952 are noted below:-

(i) *Raw materials:* The firm uses steel rounds of 1" diameter for the manufacture of 7/8" fluted rollers. The wastage of material thus involved is inevitable and the resulting scrap is also unusable at present. The wastage on account of rejections amounted to 15 to 30 per cent. of

the total materials used during 1950. The high percentage of rejections is explained mainly by the lack of experience on the part of workers. In estimating the future costs, we have allowed a wastage of 20 per cent., but we think that, with better technical control, the Company should be able to reduce its wastage to a much lower figure.

(ii) *Power and fuel, labour and consumable stores:* These have been taken at the actual figures recorded in 1950.

(iii) *Repairs, maintenance and establishment:* It has been estimated that as compared with 1950, the expenditure on account of repairs and maintenance in 1951 and 1952 should be lower by 7 per cent in the case of fluted rollers and by 12 per cent. in the case of tin rollers. In view of the higher output which is expected to be attained, the incidence of establishment charges per unit of output has also been taken at a lower figure as compared with 1950.

(iv) *Depreciation:* This has been allowed at income-tax rates on the written-down value of the assets estimated for the two items.

(v) *Other overheads:* The Managing Agents are entitled to receive a fixed monthly allowance of Rs. 2,000. This amount was actually not paid in 1950, as the Managing Agents had waived their claim. Since, however, this is a legal liability under the agreement between the Company and the Managing Agents, we consider it reasonable to provide for it in the estimate for 1951 and 1952.

(vi) *Interest on working capital:* Working capital has been taken as equivalent to 4½ months' cost of production and interest at 4 per cent. has been allowed thereon.

(vii) *Return on block:* The gross block in the fluted rollers section has been estimated at Rs. 8 lakhs and that in the tin rollers section at Rs. 90,000. A return of 10 per cent. on the gross block has been allowed in each case.

(viii) *Freight disadvantage*: Since the Company's works are located in Calcutta, while the principal markets for these products are in Bombay, Ahmedabad and Coimbatore, the Company has to pay transport charges on most of its sales. No freight is incurred on the imported products sold in Bombay and the freight payable on the imported products from Bombay or Madras to the consuming centres served by these ports is smaller than that payable on the indigenous products from Calcutta to these centres. In order to equalise the competitive position of the indigenous and the imported products, therefore, it is necessary that an allowance for freight disadvantage should be included in the fair selling prices of the indigenous products. The freight disadvantage works out to Re. 0.175 per fluted roller and Rs. 62.0 per set of tin rollers.

(ix) *Selling expenses*: The Company has stated that in many cases the c.i.f. prices of the imported articles are inclusive of the commission payable to the manufacturers' representative in India and that consequently the articles are sold at the actual import cost without any addition by way of selling expenses. We find that this contention is substantially correct. At least one important importing firm has reported its selling prices to be the same as its landed duty-paid cost. We, therefore, think that an allowance for selling expenses should be included in the fair selling price of the indigenous product, in order to make it comparable with the c.i.f. price of the imported product. In estimating the fair selling price of a complete ring frame, selling expenses were allowed at 5 per cent. of the cost of production, including profit, and we think that an allowance at the same rate will be adequate in this case also.

(x) *Insurance during transit*: The Company has claimed insurance charges at 2 per cent. in the case of fluted rollers and 5 per cent. in the case of tin rollers. Insurance charges were allowed at 1 per cent of the cost, including

profit, in the case of complete ring frames and we think that the same rate should be allowed in this case also.

(e) *Fair selling price* : On the basis discussed above, we estimate the fair selling price of fluted rollers at Rs. 11.101 per roller and that of tin rollers at Rs. 749.367 per set of five rollers for 1951 and 1952. The Texmaco desire that the details of their costs of production should be kept confidential. Such details are accordingly being forwarded to Government as a separate enclosure to this Report. A broad analysis of the fair selling prices just mentioned is, however, given below with comparative figures for 1950:-

Output	Fluted rollers		Tin rollers	
	1950	1951/52	1950	1951/52
Rs.	Rs.	Rs.	Rs.	Rs.
i. Cost of raw materials	1.210	1.210	178.160	178.160
ii. Labour and other conversion charges inclusive of interest on working capital.	8.150	7.612	317.185	297.376
iii. Packing charges	0.208	0.208	150.000	150.000
Factory cost of production.	9.568	9.030	645.345	625.535
iv. Return on fixed block	1.364	1.290	34.230	30.000
Fair ex-works price	10.952	10.320	679.575	655.535
v. Selling expenses	0.537	0.506	26.479	25.277
vi. Freight disadvantage	0.175	0.175	62.000	62.000
vii. Insurance at 1%	0.110	0.103	6.798	6.555
Fair selling price	11.774	11.104	774.850	749.367
			Rs.	Rs.
			17.610	17.031
			per	per
			running	running
			foot.	foot.

14. A statement showing the c.i.f. prices and landed c.i.f. prices costs of fluted rollers and tin rollers, as and landed reported by the Collectors of Customs and costs. certain importing firms is given in Appendix III. It will be seen that in the case of fluted rollers, while the c.i.f. prices reported by the Collectors of Customs and the majority of importers range from Rs. 10 to Rs. 12 per roller of 7/8" diameter, the price reported by Messrs. Volkart Bros. alone is Rs. 6/14 per roller of the same specification. At the public inquiry, the representatives of the Texmaco maintained that since the lower price quoted by Volkart Bros. is based on certain recent consignments actually received by them and since some important mills in Bombay had turned down the Texmaco's offers because of the lower price currently quoted by Volkart Bros., the quotation supplied by the latter firm alone was the correct basis of comparison with the fair selling price of the indigenous fluted rollers. The point was discussed at considerable length at the public inquiry and we have also subsequently gone into details of the consignments received by Volkart Bros. at the lower price quoted by them. The fluted rollers sold by Volkart Bros., are the product of Messrs. John Abel Lees & Dobb Ltd., a reputed British firm which manufactures only mill spares, and the latest consignment received by Volkart Bros. was in November 1950. We understand from the representatives of the importing firm that Abel Lees are heavily booked with orders and that their delivery dates are as long as 15 to 18 months, the actual deliveries being sometimes delayed for a still longer period. The order for the consignment received in November, 1950 was probably placed about 18 months earlier. In the case of most Indian mills, replacements have been long overdue owing to the difficulties experienced by them during the war and the early postwar period in procuring textile machinery from abroad. Most of the mills, therefore, prefer early deliveries, say, within three months or so, and those British manufacturers who are in a position to effect deliveries within a short

period have consequently not found it necessary to reduce their prices in order to compete with Abel Lees. Volkart Bros. have been quoting lower prices for the last 18 months, and yet supplies from other manufacturers have continued to be received through importers like the Indian Textile Engineers and Gannon Dunkerley at prices ranging from Rs. 10 to Rs. 12 per roller. Volkart Bros. have at our request supplied us with figures of their total imports of fluted rollers during 1950, from which it appears that despite the lower prices quoted by them, they were able to supply only 2.43% of the total estimated requirements. The Indian Textile Engineers are one of the largest importers of mill stores in Bombay, representing Platt Bros. and Tweedle and Smalleys, and despite their higher prices, the fluted rollers imported by them have continued to be in keen demand. So long as a large proportion of the domestic demand continues to be met, at the higher prices quoted by the Indian Textile Engineers and certain other firms, we see no reason to assume that the lower prices quoted by only one importing firm would adversely affect the position of the domestic industry. We have, therefore, come to the conclusion that the c.i.f. prices supplied by the Indian Textile Engineers should be adopted as the basis of comparison with the fair selling prices of the indigenous products. The c.i.f. prices in question are:

(i) For Brooks and Doxey Ring frame of 1924-328 spindles each - 22" staff, 2 $\frac{3}{4}$  gauge - 6 lines (3 sets), front fluted bottom rollers for warp, 7/8" diameter - each comprising 20 boxes of 8 spindles and one box of 4 spindles. All rollers screw-coupled and case-hardened all over. Spigot on Off End Roller for Indicator £ 35-2-4 per set of 42 rollers.

(ii) One set of front line bottom fluted rollers screw coupling for one 384 spindle warp ring frame 19" staff 2-3/8" dist. 7/8" diameter - 48 boxes 24 E.S. case-hardened £ 35-8-0 per set of 48 rollers.

Converted into Indian currency at the current rate of exchange, the c.i.f. prices per roller for the two specifications mentioned above work out to Rs. 11.186 and Rs. 9.867 respectively. The representative type of the indigenous fluted rollers to which the fair selling price estimated by us relates is 21" staff, while the c.i.f. prices supplied by the Indian Textile Engineers are for 22" and 19" staffs. We are advised by the firm that the price for 21" staff would be roughly equal to the average of the prices for 22" and 19" staffs. This comes to Rs. 10.526 per roller. On this basis, the landed cost of 21" - 7/8" diameter fluted roller works out as follows:

<u>Per fluted roller</u>	Rs.
C.i.f. price	10.526
Clearing charges at 1%	<u>0.105</u>
Landed cost ex-duty	10.631
Duty at 10½% ad valorem	<u>1.105</u>
Landed duty paid cost	<u>11.736</u>

As regards tin rollers, there have been no large imports recently, and the c.i.f. prices reported by the Collectors of Customs and importing firms relate mostly to consignments received in 1948 or 1949. One quotation supplied by the Collector of Customs, Bombay, relates to a stray consignment received in August, 1950 and does not appear to be representative of current market conditions. In the circumstances, we have decided to adopt the latest f.a.s. price furnished by the Indian Textile Engineers which is £ 45 per set of 10" diameter tin rollers for a ringframe of 400 spindles. We are informed that tin rollers have to pay more than the normal freight on account of the space occupied by them and that an addition of 17½% should be made to the f.a.s. price for ocean freight and insurance in order to arrive at the c.i.f. price. The c.i.f. price (at the current rate

of exchange) thus comes to Rs. 707.470 per line. The landed cost works out as follows:

	<u>Per set of tin rollers</u>
	Rs.
C.i.f. price	707.470
Clearing charges at 1%	<u>7.075</u>
Landed cost ex-duty	714.545
Customs duty at $10\frac{1}{2}\% ad valorem$	<u>71.284</u>
Landed duty-paid cost	<u>788.829</u>

15. In the following statement, the fair selling prices of the indigenous fluted rollers and tin rollers as estimated by us in paragraph 13 are compared with the landed costs of the corresponding imported products given in paragraph 14.

	Per fluted roller	Per set of tin rollers
	Rs.	Rs.
A. Fair selling price	11.104	749.367
B. (i) C.i.f. Price	10.526	707.470
(ii) Clearing charges at 1%	0.105	7.075
(iii) Customs duty	1.105	74.284
C. Landed cost with duty [ B(i) + (ii) + (iii) ]	11.736	788.829
D. Landed cost without duty [ B(i) + (ii) ]	10.631	714.545
E. Difference between landed cost with duty and fair selling price (C - A).	0.632	39.462
F. Difference (E) as percentage on fair selling price.	5.7%	5.3%

It will be seen that while the fair selling price of the indigenous fluted roller is Rs. 11.104, the landed cost of the imported product at the existing duty of 10½ per cent. *ad valorem* is Rs. 11.736 or 5.7% higher. Similarly, while the fair selling price of the indigenous tin roller is Rs. 749.367 per set, the landed cost of the imported product at the existing duty of 10½ per cent. *ad valorem* is Rs. 788.829 or 5.3% higher. It is clear, therefore, that the existing rate of duty affords adequate protection to the domestic industry. Since the duty on complete ringframes is 10½ per cent. *ad valorem*, there is an advantage in maintaining the duty on fluted and tin rollers also at the same rate. The industry has claimed an allowance for prejudice. From the evidence before us, however, we find that owing to import control, the prejudice as such has had little scope to operate, and since in all probability import control will be maintained in the near future for balance of payments reasons, we think that no allowance for prejudice should be made in determining the rate of protective duty. The small margin of 5 per cent. in favour of the industry at the existing rate of duty will, we think, encourage it to effect the necessary technical improvements (for which there is appreciable scope) for turning out a better product. It is possible that such improvements may initially entail a slight increase in cost. Further, we suggest that so long as complete ringframes continue to enjoy protection, the duties on fluted rollers and tin rollers should also remain in the protected category. Such duties should, therefore, have the same duration as the duty on complete ringframes, that is, up to 31st March, 1953. If and when complete ringframes cease to be protected, the question of continuing protection to fluted and tin rollers may be reviewed. In view of the exceptionally low prices at which the fluted rollers manufactured by Messrs. John Abel Lees & Dobb Ltd. are at present being offered in the market, we consider it necessary to provide that, should the general level of landed costs, ex-duty, of imported fluted rollers fall appreciably below Rs. 10-10-0

per roller, the industry may apply for a review of the protective duty on this article under section 4(1) of the Indian Tariff Act. The industry may ask for a similar review of the protective duty on tin rollers. If the general level of landed costs, ex-duty, of imported tin rollers falls appreciably below Rs. 714 per set.

16. *Import Control:* The manufacturers have asked for supplementary measures of assistance. continuance of import control, in order to enable the industry to overcome the prejudice on the part of the consumer. We have to point out that import control is at present maintained primarily for balance of payments reasons and cannot be used for affording additional protection to the domestic industry. We recognise, however, that even for the purpose of conserving foreign exchange, it is necessary that full use should be made of the resources available in the country. The existing import control policy takes this principle duly into account and we do not, therefore, consider it necessary to make any recommendation on this point, but would only like to draw attention to the conclusions reached earlier in the Report in regard to the demand for fluted rollers and tin rollers and the capacity available to meet it.

*Railway rates:* The manufacturers have suggested that in order to provide additional relief to the industry, the internal freight rates on fluted rollers and tin rollers should be reduced. We recommend that the industry should take up the matter directly with the Railway authorities, producing the necessary facts and figures to show that the existing rates are hampering a free flow of traffic.

17. The cost of fluted rollers or tin rollers, as burden on the consumer, forms a very small proportion of the total cost of production of cotton textiles. We do not think, therefore, that the present duty of 10 per cent. *ad valorem* places a heavy burden on the consumer.

18. Fluted and tin rollers are essential components of Eligibility spinning machinery, and since it is necessary for protection, that India should obtain as large a measure of selfsufficiency as possible in regard to the equipment needed by one of her major industries, it is obviously in the national interest to encourage the manufacture of these articles in the country. In view of the progress already made by the textile machinery industry in the manufacture of fluted rollers and tin rollers and the relatively low level of duty required to safeguard its position against foreign competition we think that the industry should be able to dispense with protection or State assistance in respect of these articles within a reasonable period.

19. Our conclusions and recommendations are summarised  
Summary of conclusions below:-  
and recommendations.

(i) The scope of the inquiry covers all kinds of fluted rollers and tin rollers used in textile industries. (Paragraph 3)

(ii) The Iron and Steel Controller should examine the possibility of making available to the industry 15/16" and other sizes of steel rods which are more economical for the manufacture of fluted rollers than the sizes available at present. (Paragraph 7)

(iii) The industry should be given all possible assistance in securing its requirements of tin sheets. (Paragraph 7)

(iv) The total annual demand for fluted rollers of all kinds is estimated at about 4,60,000 pieces and that for tin rollers at about 6,000 pieces. [Paragraph 8(i) & (ii)]

(v) In 1950, the domestic production of fluted rollers amounted to 73,680 pieces, of which 35,007 pieces were available for sale as spares. In the same year, the domestic production of tin rollers was 1,767 pieces, of which 358

were available for sale as spares. The Board's estimates of the production capacity, production and import requirements during 1951, 1952 and 1953 for fluted rollers and tin rollers are given in paragraph 9.

(vi) The indigenous manufacturers of fluted rollers should take note of the defects pointed out by the consumers and try to remedy them through better training of their personnel and through better technical control. (Paragraph 10)

(vii) The Indian Standards Institution should consider the desirability of evolving standard specifications for fluted rollers. (Paragraph 10)

(viii) The manufacturers should make arrangements at their own works for the proper testing of the fluted rollers produced by them. (Paragraph 10)

(ix) Government should arrange for a periodical testing of the indigenous fluted rollers and tin rollers. (Paragraph 10)

(x) Arrangements should be made with the Director General of Commercial Intelligence and Statistics and the Collectors of Customs to record separately imports of fluted rollers and tin rollers in future. [Paragraph 11(a)]

(xi) The existing duty of 10½ per cent. *ad valorem* on fluted rollers and tin rollers affords adequate protection to the domestic industry. The duty should remain in the protected category, so long as complete ring frames continue to enjoy protection, and should have the same duration as the duty on complete ring frames, that is, upto 31st March, 1953. (Paragraph 15)

(xii) The industry may make its representations regarding the internal freight rates on fluted rollers and tin rollers directly to the Railway authorities, producing the necessary facts and figures to show that the existing rates are hampering the free flow of traffic. (Paragraph 16)

20. We wish to express our thanks to Shri F.A.F. Acknowledgements. Jesudian, Director, Machinery, Fuel & Stores in the Textile Commissioner's Office, Bombay and Shri S.V. Rajan, Assistant Cost Accounts Officer attached to the Board, for the assistance they gave us in connection with this inquiry.

H. L. DEY,  
*President.*

B. N. ADARKAR,  
*Member.*

M. A. MULKY,  
*Secretary.*

Bombay,  
*Dated 14th May, 1951.*



APPENDIX I  
(*Vide* paragraph 4)

*List of persons or bodies to whom the Board's questionnaires were issued and from whom replies or memoranda were received.*

\* Indicates those who replied to the questionnaire or sent their memoranda.

A. PRODUCERS:

1. Acme Manufacturing Co. Ltd.,  
Antop Hill, Wadala,  
Bombay.
2. Annapura Engineering Works,  
Bangalore.
- \* 3. Lakshmiratan Engineering Works Ltd.,  
Empire House, Hornby Road, Fort,  
Bombay.
4. Machinery Manufacturers' Corporation Ltd.,  
Gateway Building, Apollo Bunder,  
Bombay.
- \* 5. National Machinery Manufacturers Ltd.,  
C/o Indian Textile Engineers Ltd.,  
United India Building,  
Sir P.M. Road, Bombay.
- \* 6. Ramakrishna Industrials Ltd.,  
Peelamedu Post (Coimbatore District).
- \* 7. Star Textile Engineering Works Ltd.,  
509, Sir Vithaldas Chambers,  
16, Apollo Street, Fort; Bombay.
- \* 8. Textile Machinery Corporation Ltd.,  
8, Royal Exchange Place, Calcutta.
- \* 9. Textool Co. Ltd.,  
P.Box No. 221, Coimbatore.

## B. IMPORTERS:

1. Associated Textile Engineers  
43, Forbes Street, Fort,  
Bombay.
2. Brady & Co. Ltd.,  
Churchgate Street, Fort,  
Bombay.
3. Elgin Mills Co. Ltd.,  
P. Box No. 11, Kanpur.
4. Gannon Dunkerly & Co. Ltd.,  
Chartered Bank Building,  
Esplanade Road, Bombay.
5. Greaves Cotton & Co. Ltd.,  
1, Forbes Street, Fort,  
Bombay.
- \* 6. Indian Textile Engineers Ltd.,  
193, Medows Street, Fort,  
Bombay.
7. Ormerods (India) Ltd.,  
Bank of Baroda Building,  
Apollo Street, Fort,  
Bombay.
8. Sizing Materials Co. Ltd.,  
Jeroo Building,  
137, Esplanade Road, Fort,  
Bombay.
9. Sorabji Shapurji & Co. Ltd.,  
Wadia Building,  
22-D, Parsi Bazar Street, Fort,  
Bombay.
- \* 10. Star Trading Co. Ltd.,  
Botawala Building,  
11-13, Elphinstone Circle, Fort,  
Bombay.
11. Swastik Textile Trading Co. Ltd.,  
M.H. Market, Railwaypura Post,  
Ahmedabad.

## IMPORTERS (Contd)

12. Textile Supplies Syndicate (India) Ltd.,  
Kermani Building, Sir P.M. Road,  
Fort, Bombay.
- \* 13. Volkart Brothers,  
Graham Road, Ballard Estate, Fort,  
Bombay.

## C. CONSUMERS:

1. Arvind Mills Ltd.,  
Naroda Road, Ahmedabad.
- \* 2. Bangalore Woollen, Cotton & Silk Mills Co. Ltd.,  
Bangalore City.
3. Burhanpur Tapti Mills Ltd.,  
Cook's Building, 321, Hornby Road,  
Fort, Bombay.
4. Century Spinning & Manufacturing Co. Ltd.,  
Queen's Mansion, Prescot Road, Bombay-1.
- \* 5. Delhi Cloth & General Mills Co. Ltd.,  
Delhi.
6. India United Mills Co. Ltd.,  
Indu House, Dougall Road,  
Ballard Estate, Bombay.
- \* 7. Kamala Mills Ltd.,  
Kilachand Devchand Bldg.,  
4<sup>th</sup>-17, Apollo Street, Fort,  
Bombay.
8. Khatau Makanji Spg. & Wvg. Co. Ltd.,  
Haines Road, Byculla, Bombay.
9. Kohinoor Mills Co. Ltd.,  
Lady Jamshedji Road,  
Dadar, Bombay.
10. Madura Shreenivas Mills Ltd.,  
Madura (South India).
- \* 11. Model Mills Nagpur Ltd.,  
Umrer Road, Nagpur City.

## CONSUMERS: (Contd.)

- \* 12. Modern Mills Ltd.,  
70, Forbes Street, Fort,  
Bombay.
- 13. New Prahlad Mills Ltd.,  
Ferguson Road, Lower Parel,  
Bombay.
- 14. Sayajeeroa Cotton Mills Ltd.,  
Gwalior.
- 15. Sirur & Co. Ltd.,  
Temple Bar Building,  
70, Forbes Street, Fort,  
Bombay.
- 16. Soundararaja Mills Ltd.,  
Dindigul, South India.

## D. ASSOCIATIONS:

- 1. Ahmedabad Millowners' Association,  
Laldarwaja, Ahmedabad.
- 2. Association of Merchants and Manufacturers  
of Textile Stores and Machinery,  
Wadia Building, Dalal Street, Fort,  
Bombay.
- 3. C.P. and Berar Millowners' Association,  
Nagpur.
- 4. Engineering Association of India,  
23-B, Netaji Subhas Road, Calcutta.
- \* 5. Millowners' Association,  
Elphinstone Building, Churchgate Street,  
Fort, Bombay.
- 6. Southern India Millowners' Association,  
Race Course, Coimbatore.

APPENDIX II  
(*Vide* paragraph 1)

*List of persons who attended the Board's Public Inquiry on 27th February, 1951.*

A. PRODUCERS:

1. Shri Krishnaraj M.D. Thakersey	Representing	National Machinery Manufacturers Ltd., C/o. Indian Textile Engineers Ltd., United India Building, Sir. P.M. Road, Bombay.
2. Mr. Thomas F. Borwick		
3. Shri S.M. Maheshwari		Textile Machinery Corporation Ltd.; 8, Royal Exchange Place, Calcutta.
4. " S.C. Kela		
5. Shri. H.G. Dalal		Star Textile Engineering Works Ltd.; 509, Sir Vithaldas Chambers, 16, Apollo Street, Fort, Bombay.
6. Mr. R. Jenks		Lakshmiratan Engineering Works, Ltd., Empire House, Hornby Road, Fort, Bombay.
7. Shri J.S. Karkal	"	Machinery Manufacturers' Corporation Ltd., Gateway Building, Apollo Bunder, Bombay.
8. Shri Bharat G. Doshi	"	Acme Manufacturing Co. Ltd., Antop Hill, Wadala, Bombay.
9. " V.G. Joshi		

B. IMPORTERS:

1. Mr. M. Gibson	"	Indian Textile Engineers Ltd., 193, Meadows St., Fort, Bombay.
2. Mr. T. Brewer		
3. Shri. T.V. Ramaswamy		Volkart Brothers, Graham Road, Ballard Estate Bombay.

## IMPORTERS: (Contd.)

4. Mr. E. Jackson	Representing	Dodd & Co., Bombay.
5. Shri S.K. Mani	"	Gannon Dunkerley & Co. Ltd., Chartered Bank Building, Esplanade Road, Bombay.
6. Mr. Gillespie	"	Gannon Dunkerley & Co. Ltd., Chartered Bank Building, Esplanade, Bombay.
7. Mr. Campbell	"	The Sizing Materials Co. Ltd. Jeroo Building, 137, Esplanade Road, Bombay.

## CONSUMERS:

1. Shri B.D. Kulkarni	Millowners' Association, Elphinstone Building, Churchgate Street, Fort, Bombay.
" D.F. Kapadia	

## SUPPLIERS OF RAW MATERIALS:

1. Shri B.N. Tam	Tata Iron & Steel Co. Ltd., Bombay House, Bruce Street, Fort, Bombay.
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## ASSOCIATIONS:

Shri B.C. Munshaw	"	Association of Merchants and Manufacturers of Textile Stores & Machinery, Wadia Building, Dalal Street, Fort, Bombay.
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## GOVERNMENT OFFICERS:

1. Shri F.A.F. Jesudian	"	Textile Commissioner to the Govt. of India, Bombay.
2. Shri V.V. Apte	"	Director of Industries, Bombay.

## APPENDIX III

(Vide paragraph 14)

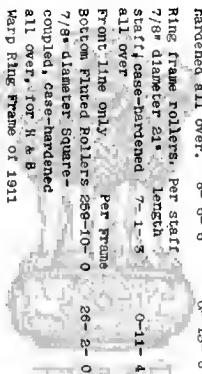
STATEMENT SHOWING THE BREAK-DOWN OF LANDED COSTS OF FLUTED ROLLERS AND TIN ROLLERS  
INTO C.I.F., CUSTOMS DUTY, CLEARING CHARGES ETC.

## (1) FLUTED ROLLERS

S. No.	Source of Information	Origin or Import	Date of Import	Type and Specification	C.I.F. Rs. As. Ps.	Customs duty	Clearing charges	Landed cost	Selling price	Remarks
1	2	3	4	5	6	7	8	9	10	11

1. Indian Textile Engineers Ltd., U.K. 1948 Fluted rollers for ring frames. Per line 10/-  
Bombay. -do- 14-11-50 For Brooks and Dorey Ring Frame, 11-2-11  
Year 1924, 326 spindles each, 24" staff, 24" shaft. 6 lines (3 sets)  
Front Fluted Bottom Rollers for warp 7/8" diameter each; comprising 20 boxes of 8 spindles and one box of 4 spindles. All Rollers screw-coupled and case-hardened all over. Snigot on off End roller for indicator.

	1	2	3	4	5	6	7	8	9	10	11
1. Indian Textile Engineers Ltd., Bombay, (C.M.G.)	U.K.	12-1-51	One set of Front Line Bottom Flued Rollers, Screw-coupling for 1/884 spindle warp Ring, Frame 19" Staff 2 3/8" Dist. 7/8" diameter 48 boxes 24 F.R., case-hardened.								
2. Star Trading Co. Ltd., Bombay,	England	1949	Ring frame rollers Per staff 7/8" diameter 21" length staff, case-hardened all over. 8- 9- 6 0- 13- 8 0- 1-10 9- 6- 0 10- 5- 0								
	-do-	-do-	-do-	Ring frame rollers, Per staff 7/8" diameter 21" length staff, case-hardened all over. 7- 1-3 0- 1- 4 0- 1- 9 7-11-4 8-11- 0							
3. Volkart Brothers, Bombay,	U.K.	25-4-50	Front line only Per frame bottom flued rollers 258-10- 0 7/8" diameter square-coupled, case-hardened all over, for N & B warp ring frame of 1911 make, 340 spindles, 22" gauge, 22" staff 20 boxes of 8 spindles 1 or 6 spindles and 1 or 4 spindles on each side.		26- 2- 0	2- 2- 0	287-14- 0	3536- 3- 0			
	-do-	-do-	November, 1950	Front line only bottom flued rollers 7/8" 6-14- 0 diameter, square-coupled case-hardened throughout for 12 T & S warp ring frames each having 364 spindles, 2 1/5" gauge 22" staff, 118 boxes of 10 spindles each and 2 boxes of 6 spindles each per line.							



1	2	3	4	5	6	7	8	9	10	11
4.	Collector of Customs, Calcutta.	U.K.	23-3-49	B.D. back line bottom Fluted Rollers 13/16" diameter.	492- 2- 0	Per set	-	-	-	-
-d0-	-d0-	-d0-	-d0-	B.D. front fluted Rollers 13/16" dia- meter.	492- 2- 0	Per set	-	-	-	-
-d0-	-d0-	-d0-	-d0-	B.D. front bottom Fluted Rollers 7/8" diameter.	498- 8- 0	Per set	-	-	-	-
-d0-	-d0-	-d0-	-d0-	B.D. 3rd line bottom Fluted Rollers 3/4"	486- 1- 0	Per set	-	-	-	-
-d0-	-d0-	-d0-	-d0-	P.B. bottom Fluted Rollers for 480 spindles slubbers 20" staff No. 4 gauge 1.178-1.18" diameter.	780- 8- 0	Per set	-	-	-	-
-d0-	-d0-	-d0-	-d0-	H.B. front Fluted Rollers 7/8" dia- meter.	417-11- 0	Per set	-	-	-	-
5.	Collector of Customs, Madras.	U.K.	27-1-60	For ring frames 308 spindles 3 $\frac{1}{2}$ " or 6.19 $\frac{1}{2}$ gauge, 25 2/3 boxes 4 lines of front bottom steel fluted Rollers 7/8" diameter.	509- 0- 0	Per line	-	-	-	-
-d0-	-d0-	-d0-	-d0-	For ring frames 360 spindles 2 $\frac{1}{2}$ " or 8- 20 gauge, 22-2" boxes 4 lines of front bottom steel fluted Rollers 7/8" diameter.	653- 0- 0	Per line	-	-	-	-

Collector of Customs  
Madras. -do-

U.K. 16-6-50

For ring frames 312  
spindles 2-7/8" or  
8-23 gauge, 19- $\frac{1}{2}$

boxes 6 lines of

front bolten fluted  
rollers 7/8" diam.

Per line  
506-11- 0

-do-

-do- For ring frames 356  
spindles 2- $\frac{1}{2}$ " or

8-20 gauge 21 $\frac{1}{4}$ "  $\frac{1}{2}$   
boxes -6 lines of

fluted rollers 7/8"  
diameter.

Per line  
502-11- 0

-do-

-do- For ring frames 388  
spindles 2-5/8" or

8-21 gauge 23 $\frac{1}{4}$ "  $\frac{1}{2}$   
boxes -6 lines of

fluted rollers 7/8"  
diameter.

Per line  
575- 9- 0

-do-

-do- For ring frames 420  
spindles 2- $\frac{1}{2}$ " or

8-20 gauge, 25 $\frac{1}{4}$ - $\frac{1}{2}$   
boxes -21 lines of

front bolten fluted  
rollers 7/8" diam.

Per line  
593- 0- 0

-do-

-do- 13-7-50 Ring frames 5" left

2.5/8" gauge year  
1920-21 : - 7/8"  
diameter, front line

fluted rollers 2.5/8"  
gauge 296 spoles.

Per line  
436- 0- 0

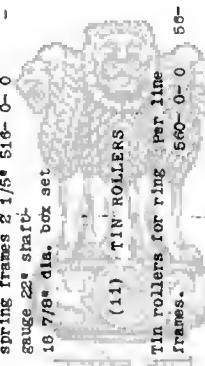
-do-

-do- Ring frames 5" left

2.5/8" gauge year  
1920-21: - 3/4" diam.

Per line  
426- 0- 0

1	2	3	4	5	6	7	8	9	10	11
6.	The Collector of Customs, Bombay.	U.K.	26-8-50	Fluted Rollers for frame of 316 spin- dles 2 <sup>1</sup> gauge 10 <sup>1</sup> Box per set of 14	Per set 505-0-0	-	-	-	-	-
-10-	-10-	19-9-50	Fluted Rollers for frames of 332 spin- dles 2 3/8" gauge 22 box diam. 34" set of 14.	Per set 425-0-0	-	-	-	-	-	-
-10-	-10-	-10-	-10-	Diameter 7/8"	Per set 480-0-0	-	-	-	-	-
-10-	Switzerland	20-11-50	Fluted rollers for spring frames 2 1/5" 516-0-0 gauge 22" start- 16 7/8" dia. box set	Per set 560-0-0	-	-	-	-	-	-
1.	Indian Textile Engineers Ltd., Bombay.	U.K.	1948	Tin rollers for ring frames.	Per line 560-0-0	65-0-0	14-0-0	630-0-0	630-0-0	630-0-0
-10-	-10-	-10-	January 1951	10" diameter Tin Rollers for a frame of 400 spindles.	Per line 707-7-5	-	-	-	-	-
2.	Star Trading Co. Ltd., Bombay.	England	1949	Tin Rollers 10" diam.	Per foot 23-10-5	2-6-0	0-6-0	26-6-5	29-0-8	
3.	Collector of Customs, Calcutta.	U.K.	17-6-49	B.D. Double Tin rol- lers Bearer complete with rings.	per piece 78-7-0	-	-	-	-	
4.	Collector of Customs, Bombay.	U.K.	27-8-50	One set of Tin rollers 11" as under:-	148-2-0					
				1 gearing end drive side 9-1"						
				1 gearing end home drive side 9-1"						
				4 Middle 9' 5 7/ "						
				2 Offend 7' 7 1/ "						



(11) TIN ROLLERS

		Symbol	— No.
30. Fir		PTB	120
31. Ste		PTB	119
32. Fer		PTB	116
33. Ole	earl. acid (1947)	PTB	117
34. Mac	47)	PTB	114
35. Wires	3)	PTB	123
36. Pickle		PTB	125
37. Motor	batteries (1948)	PTB	122
38. Hydral	brake fluid (1948)	PTB	129
39. Bobbins	(1948)	PTB	128
40. Slate and slate pencils	(1949)	PTB	138
41. Expanded metals	(1949)	PTB	150
42. Cotton textile machinery	(ring frames, spindles, spinning rings and plain looms) (1949)	PTB	167
43. Small tools	(1949)	PTB	149
44. Plastics	(1949)	PTB	160
45. Soda ash	(1949)	PTB	165
46. Glass and glassware	(1950)	PTB	174
47. Sterilised surgical catgut	(1950)	PTB	184
48. Liver extract	(1950)	PTB	185
49. Fountain Pen Ink	(1950)	PTB	183
50. Pencils	(1950)	PTB	187
51. Fine Chemicals	(1950)	PTB	182
52. Sago	(1950)	PTB	186
53. Belt Fasteners	(1950)	PTB	189

(B) Review Cases

1. Iron and steel manufactures	(1947)	PTB	106
2. Paper and paper pulp	(1947)	PTB	108
3. Cotton textile manufactures	(1947)	PTB	96
4. Sugar	(1947)	PTB	107
5. Magnesium chloride	(1946)	PTB	124
6. Silver thread and wire	(1948)	PTB	126
7. Bicycles	(1949)	PTB	131
8. Artificial silk	(1949)	PTB	132
9. Sericulture	(1949)	PTB	133
10. Alloy tool and special steel	(1949)	PTB	136
11. Sodium thiosulphate, sodium sulphite and sodium bisulphite (under section 4(1) of the Tariff Act)	(1949)	PTB	140
12. Calcium chloride	(1949)	PTB	148

		Symbol	No.
13. Grinding wheels (under section 4(1) of the Tariff Act) (1949)	PTB	141	
14. Hurricane lanterns (under section 4(1) of the Tariff Act) (1949)	PTB	144	
15. Sugar (1949)	PTB	134	
16. Preserved fruits (1949)	PTB	143	
17. Coated abrasives (under section 4(1) of the Tariff Act) (1949)	PTB	147	
18. Antimony (1949)	PTB	151	
19. Phosphates and Phosphoric acid (1949)	PTB	161	
20. Starch (1949)	PTB	153	
21. Bichromates (1949)	PTB	168	
22. Ferro-silicon (1949)	PTB	150	
23. Sewing machines (1949)	PTB	170	
24. Cocoa powder and chocolate (1949)	PTB	172	
25. Electric motors (1949)	PTB	156	
26. Steel belt lacing (1949)	PTB	171	
27. Cotton and hair belting (1949)	PTB	173	
28. Calcium chloride (1950)	PTB	175	
29. Sugar (1950)	PTB	179	
30. Potassium permanganate (1950)	PTB	176	
31. Wood screws (1950)	PTB	177	
32. Dry battery (1950)	PTB	180	
33. Stearic acid and Oleic acid (1950)	PTB	178	
34. Plywood and teachests (1950)	PTB	181	

#### II. PRICE REPORTS

1. Cotton yarn and cloth prices (1948)	PTB	127
2. Paper prices (1948)	PTB	130
3. Fair ex-works prices of superphosphate (1949)	PTB	135
4. Fair retention prices of steel produced by Tatas and SCOB (1949)	PTB	129
5. Ex-works costs of hot metal (Iron for steel making) and fair ex-works prices of pig iron. (Basic and foundry grade) (1949)	PTB	137
6. Fair retention prices of Steel produced by Mysore Iron & Steel Works, Bhadravati (1949)	PTB	151
7. Fair retention prices of Steel produced by the Tata Iron & Steel Company & The Steel Corporation of Bengal (1951)	PTB	205

*All the above reports are available with the Manager of Publications, Civil Lines, Delhi, and the Secretary, Indian Tariff Board, Contractor Building, Ballard Estate, Bombay 1.*